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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,137	12/19/2001	Mai H. Nguyen		2752

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EXAMINER	
CHEN, LIPING	

ART UNIT	PAPER NUMBER
1632	

DATE MAILED: 11/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.	Applicant(s)
10/029,137	NGUYEN, MAI H.
Examiner	**Art Unit**
Liping Chen	1632

Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-54* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-7 and 11, drawn to an isolated nucleic acid, a vector containing the isolated nucleic acid, and a host cell, classified in 435, subclass 70.1.

II. Claims 8-10, drawn to polypeptide comprising the amino acid sequence of SEQ ID NO:2 or conservative substitutions, classified in 530, subclass 351.

III. Claims 12-14, drawn to an antibody that specifically binds to a peptide comprising the amino acid sequence of SEQ ID NO:2, classified in class 530, subclass 387.1+.

IV. Claims 15-24, 27-28 and 48, drawn to a method of screening for a test agent or identifying a predilection of abnormal angiogenesis comprising contacting a cell comprising an EG-1 gene with a test agent and detecting a change in the expression of an EG-1 gene product in the cell, classified in 435, subclass 4, or class 514, subclass 2.

V. Claims 15 and 25-28, drawn to a method of screening for a test agent or identifying a predilection of abnormal angiogenesis comprising contacting a cell comprising an EG-1 gene with a test agent and detecting a change in the activity of an EG-1 gene product in the cell, classified in 435, subclass 4, or class 514, subclass 2.

VI. Claims 29-36 and 39-42, drawn to a method of prescreening for an agent comprising contacting an EG-1 nucleic acid with a test agent and detecting the specific binding of the test agent to the EG-1 nucleic acid, classified in class 423, subclass 1, or class 514, subclass 2.

VII. Claims 29-36 and 39-42, drawn to a method of prescreening for an agent comprising contacting an EG-1 protein with a test agent and detecting the specific binding of the test agent to the EG-1 protein, classified in class 423, subclass 1, or class 514, subclass 2.

VIII. Claims 43-47, drawn to a transgenic animal comprising a recombinantly modified EG-1 gene which does not transcribe a functional EG-1 protein, classified in class 800, subclass 8.

IX. Claims 49-54, drawn to a method of inhibiting angiogenesis comprising inhibiting the expression or activity of an EG-1 gene product, classified in 435, subclass 1.

In addition, upon the election of any of group IV and V, further election of the following patentably distinct species of the claimed invention is required:

Contacting cells *ex vivo*, or *in vivo* (to an animal)

Upon the election of any of group VI and VII, further election of the following patentably distinct species of the claimed invention is required:

Contacting nucleic acid or protein directly, or contacting nucleic acid or protein in cells ex vivo, or in an animal (in vivo)

The species of different contacting of groups IV-VII are distinct because they differ at least in objectives, method steps, reagents and/or dosages, and/or schedules used, response variables, and criteria for success.

Upon the election of group IX, further election of the following patentably distinct species of the claimed invention is required:

A ribozyme, a catalytic DNA, homologous recombinaiton, intrabody, antisense, EG-1 polyupeptide, or antibody

These species are distinct because they are drawn to materially different methods using compositions having different chemical structures, physical properties and biological functions, and requiring separate search.

The inventions are distinct, each from the other because:

Groups I-III and VIII are distinct from each other because they are drawn to compositions having different chemical structures, physical properties and biological functions: polynucleotides, polypeptide, antibody, and transgenic animal, respectively, which require separate search. Search for any group does not require search for all others. Since the classification for each is different, the search for each group would not be coextensive. They are not obvious variants and deemed patentably distinct.

Group IV and V are distinct from each other because they are drawn to distinct detecting methods: gene expression, or protein activity. These methods differ at least in objectives, method steps, reagents and/or dosages, and/or schedules used, response variables, and criteria for success. Thus, groups IV and V are patentably distinct from each other.

Group VI and VII are independent from each other because they are drawn to materially distinct methods: binding to nucleic acid, or binding to protein. These methods differ at least in objectives, method steps, reagents and/or dosages, and/or schedules used, response variables, and criteria for success. Thus, groups VI and VII are patentably distinct from each other.

Groups IV-V and IX and groups VI-VII are independent from each other. The detecting gene expression of groups IV-V and IX is not needed for the detecting a testing agent binding to nucleic acid or protein of groups VI-VII, and vice versa.

Groups IV-V and group IX are distinct from each other because they are drawn to materially different methods using compositions having different chemical structures, physical properties and biological functions: polypeptides or polynucleotides, which have different classifications and require separate search. They are not obvious variants and deemed patentably distinct.

Groups I-III and groups IV-VII and IX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with

another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case group I can be used for recombinant polypeptide production, group II can be used for antibody production and group III can be used for immunoprecipitation.

Group VII and groups IV-VII and IX are independent from each other. The transgenic animal of group VIII is not needed for the methods of groups IV-VII and IX, and vice versa

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, because of their recognized divergent subject matter, and the search required for any group is not required for remaining groups, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one

claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liping Chen, whose telephone number is (703) 305-4842. The examiner can normally be reached on Monday through Friday from 8:00 to 5:00 (Eastern Standard Time). Should the examiner be unavailable, inquiries should be directed to Deborah Reynolds, Supervisory Primary Examiner of Art Unit 1632, at (703) 305-4051. Any administrative or procedural questions should be directed to Dianiece Jacobs, Patent Analyst, at (703) 305-3388. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center number is (703) 308-8724.

Liping Chen, Ph.D.
Patent Examiner
Group 1632

Deborah Reynolds

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